

RESEARCH PAPER

Smoking in Scottish youths: personal income, parental social class and the cost of smoking

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Objective: To examine the relation of young people's personal income and parental social class with smoking from early to mid adolescence.

Design: Longitudinal, school based, study of a cohort of 2586 eleven year-olds followed up at ages 13 and 15.

Setting: West of Scotland.

Participants: 93% baseline participation, reducing to 79% at age 15.

Main outcome measures: Ever smoked (age 11), current and daily smoking (ages 13 and 15) and the proportion of income spent on tobacco (13 and 15) based on recommended retail prices of usual brands.

Results: Strong independent effects of parental social class and personal income were found at 11 years, both reducing with age. The higher incomes of lower class participants attenuated the social class effect on smoking at ages 11 and 13, but not at 15. Analysis within class groups showed variation in the effect of income on smoking, being strongest among higher class youths and weak or non-existent among lower class youths. This was despite the fact that the proportion of weekly income apparently spent on tobacco was greater among lower class youths.

Conclusions: The results confirm the importance of personal income and parental social class for youth smoking, but they also show that personal income matters more for those from higher class backgrounds. This suggests both that lower class youths have greater access to tobacco from family and friends and to cheaper sources of cigarettes from illegal sources. This complicates the relation between fiscal policies and smoking and might have the unintended consequence of increasing class differentials in youth smoking rather than the reverse.

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Although there are signs of a reduction in smoking among young people in several countries, including the United States,¹ England² and Scotland,³ prevalences remain worryingly high. While most public awareness and health education programmes have had limited success,^{4–5} fiscal policies have gained acceptance as one of the more promising strategies of prevention, cessation and reduction in consumption.^{6–9} The evidence base for such policies in relation to adults is well established, a substantial body of econometric research demonstrating an association between the price of tobacco and the prevalence of smoking and cigarette consumption.^{10–15} There is also UK evidence that unskilled workers are most price sensitive,¹¹ supporting the view that fiscal policies are particularly effective in reducing smoking among adults in low income groups.^{12–16}

In relation to youth, the evidence is less conclusive, particularly relating to smoking initiation and experimentation.^{15–19} Some earlier cross-sectional studies reported young people to be more price sensitive than adults^{20–21} while others^{22–23} found little or no effect. More recent studies specify the relation between tobacco price and smoking more precisely, taking into account a range of factors including sociodemographic characteristics^{24–27} and other tobacco control measures.^{24–28} Although some studies continue to find no price effect,^{17–28} those that do have produced more conservative estimates.^{27–29} With a few exceptions,^{26–30} however, this effect is restricted to higher levels of smoking, the evidence for an impact of price on smoking initiation or experimentation, or on younger rather than older youths, being weaker.^{17–18–25–28–31–32} The only UK study, by Forster and Jones, found no effect of price on smoking initiation.³³ Estimates, however, are typically based on a standard retail price of cigarettes, which might not reflect

what young people actually pay.¹⁹ None of these studies included data on tobacco expenditure, though one¹⁹ found subjective perception of price to be a stronger predictor of smoking than retail price.

Although several studies of young people include socio-demographic and other factors as controls,^{25–26–31} little attention has been given to subgroup variations in price sensitivity.³⁴ In one of the few (US) studies to address this issue,²⁹ which found a greater effect in black than white youths, the author speculated this might reflect differences in socioeconomic status (SES), the assumption being that, as with UK adults,¹¹ young people from lower SES family backgrounds are more price sensitive. Similarly, despite the fact that several studies control for young people's income, little attention has been given to possible variations in price sensitivity according to income level, nor to how this might vary with family SES.

This lack of attention is surprising given that family SES and personal income are key predictors of smoking in youth. With respect to the former, with some exceptions,³⁵ the weight of evidence is that smoking prevalence is higher among lower SES youths whether measured by parental education as in the United States^{19–27–31–36–37} or parental social class in the United Kingdom.^{3–38–39} The relation with class also strengthens with increasing levels of consumption.⁴⁰ With respect to personal income, many studies report that both smoking prevalence and consumption increase directly with the amounts received from pocket money or other sources such as part-time earnings.^{19–25–26–31–41–43} Since, on the plausible assumption that young people (like adults) from higher SES backgrounds have more money, these two findings appear paradoxical. However, in the

Abbreviations: RRP, recommended retail price; SES, socioeconomic status

same dataset as used here, we found an inverse relation between personal income and parental social class in adolescence, lower class youths having more money than those from higher class backgrounds (fig 1).⁴⁴ This not only implies that the relation between smoking and (lower) family SES might be partly explained by (higher) personal income, it also suggests the income/smoking relation might vary by SES.

This paper utilises data from the West of Scotland to address four questions about the association between personal income and family SES (represented by parental social class) with smoking from early to mid-adolescence (ages 11, 13 and 15). Firstly, what is the association of personal income and social class with smoking at each age, and to what extent does income explain any class effect? Secondly, does the relation of personal income to smoking vary within social classes? Thirdly, do the effects of social class and personal income, and income within classes, vary by age and level of smoking? Fourthly, does expenditure on tobacco, and the proportion of income spent, vary by social class? If, as assumed in the econometric literature, the cost of smoking is the same for all young people, irrespective of class, then the relation between personal income and (expenditure on) smoking should not vary by class. However, if the relation between personal income and smoking does vary, this suggests the cost of smoking differs by class. In this case, the assumption that all young people access tobacco from similar sources, at the same price, may be wrong.

METHODS

Data are taken from the "West of Scotland 11 to 16 study."⁴⁵ "11 to 16" is a longitudinal, school based, study of a cohort resident in the Central Clydeside conurbation, a predominantly urban area in the West of Scotland. The cohort was first surveyed aged 11 (1994) and followed up on two occasions, aged 13 (1996) and aged 15 (1999). Full details of the sample design are available elsewhere.⁴⁶ Of the issued sample, 2586 (93%) participated in the baseline survey, 86% of parents also completing a questionnaire. By age 13, sample losses reduced the number of participants to 2371 (85%), further reducing to 2196 (79%) at 15. Although the sample was representative at baseline,⁴⁷ thereafter differential attrition made it less so, losses being greater among particular subgroups, including lower

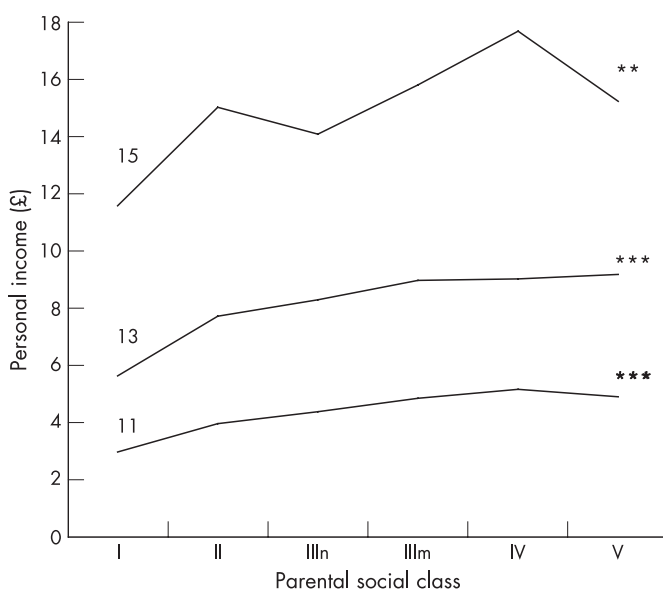


Figure 1 Personal income (mean (£ per week) by parental social class at ages 11, 13 and 15. Significance of linear trend: ** $p < 0.01$; *** $p < 0.001$. Source: adapted from West of Scotland 11 to 16 study.⁴⁴ Reproduced by permission of Taylor & Francis.

social classes. However, a weighting scheme to compensate for biases reveals negligible effects on any of the analyses presented here; consequently, unweighted data are used.

Procedures and measures

"11 to 16" was approved by Glasgow University's ethics committee. Data were collected via self complete questionnaires administered in exam-type conditions. Participants were informed that all information provided was confidential, the only people seeing their answers being the research team who checked questionnaires on completion.

Personal income

Although the question format varied between waves,⁴⁴ data are consistently available on the total income (pounds and pence) participants reported receiving from pocket money, domestic earnings and external work. As might be expected, these data are not normally distributed, most receiving fixed amounts from parents (for example, £2, £5 or £10 a week). To allow comparison between ages, these data are divided into quartiles, the actual amounts being: age 11, <£2, £2–3.50, >£3.50–5, >£5; age 13, <£5, £5–6, £6–10, >£10; and age 15, <£5, £5–10, £10–20, >£20.

Parental social class

Parental social class, one of several measures of family SES in the study,⁴⁸ is based on occupational data derived mainly from parents or, in the absence of this information, from reports provided by their 11-year-old children which we have found to be reliable.⁴⁹ All occupations were coded to the Registrar General's classification,⁵⁰ from which social class of the head of household is derived, defined as father's current or previous occupation if not currently employed or, in the absence of a father figure, mother's current or previous occupation. The full classification is used except when examining income/smoking associations within social class; here because of small numbers, we use three categories (non-manual, III manual and IV–V).

Table 1 Descriptive statistics: sex, parental social class and personal income (quartiles) distributions and smoking prevalence at ages 11, 13 and 15

	Aged 11 No (%)	Aged 13 No (%)	Aged 15 No (%)
Sex			
Male	1335 (51.6)	1222 (51.5)	1116 (50.8)
Female	1251 (48.4)	1149 (48.5)	1080 (49.2)
Social class			
I	135 (5.7)	129 (5.9)	125 (6.1)
II	570 (24.0)	542 (24.6)	523 (25.4)
III _{non}	323 (13.6)	303 (13.7)	284 (13.8)
III _{man}	781 (32.9)	718 (32.6)	665 (32.3)
IV	402 (16.9)	366 (16.6)	336 (16.3)
V	165 (6.9)	146 (6.6)	127 (6.2)
(Missing)	210 (8.1)	167 (7.0)	136 (6.2)
Personal income			
Quartile 1	522 (20.2)	512 (22.0)	469 (21.9)
Quartile 2	846 (32.8)	577 (24.8)	652 (30.4)
Quartile 3	583 (22.6)	737 (31.7)	578 (26.9)
Quartile 4	629 (24.4)	498 (21.4)	447 (20.8)
Smoking			
Ever	347 (13.4)	1229 (51.9)	1466 (66.8)
Current	13 (0.5)	277 (11.7)	559 (25.5)
Regular	3 (0.1)	244 (10.3)	481 (21.9)
Daily		137 (5.8)	388 (17.7)
5+ cigs/day		36 (1.5)	213 (9.7)
Sample size	2586	2371	2196

Smoking

Modelled on the standard UK format,^{2,3} at each stage participants were asked whether they (1) "never smoked," (2) "only tried smoking once," (3) "used to smoke but gave up," (4) "smoke occasionally (sometimes)," (5) "smoke regularly (1+ cigarettes a week)." At 13 and 15, they were also asked their usual brand and how many cigarettes a week they smoked. From this, the following measures are used: at age 11, ever smoker, and at 13 and 15, to capture different levels of smoking, current (regular + occasional) and daily (7+ cigarettes per week) smoker. Such self reports have been found to be valid indicators of smoking.^{51, 52}

Derived expenditure on tobacco

Although participants were not questioned about spending patterns, weekly tobacco expenditure (derived from tobacco manufacturing sources) can be calculated from the number of cigarettes smoked per week together with the recommended retail price (RRP) of usual cigarette or tobacco brands during two fieldwork periods in 1996 and 1999 (details on request). This enables a measure of the proportion of weekly income spent on tobacco by regular smokers at age 13 and 15. These measures, like those in the econometric literature, are not necessarily the same as actual amounts spent since they assume purchase is from legal retail outlets rather than informal or illegal sources.

Analysis

Firstly, we present a series of logistic regressions which model the independent effects of parental social class and personal income on smoking at each age. All models adjust for sex and age (months), the latter because older 11, 13 and 15-year-olds had higher incomes and were more likely to smoke. To enable comparison between models, analyses exclude all missing data. Secondly, because there is evidence of interaction effects, we present the effects of income on smoking within social class at each age. To investigate possible threshold effects, we also tested for quadratic and cubic functions, but these fell well short of statistical significance. Because the range of income received by young people was very broad, some reporting extremely high amounts, we also examined outlier effects by repeating analyses with the top 1% and 3% of incomes excluded. Since results were unaffected, the full range of income is utilised.

RESULTS

Table 1 presents the distributions of the independent variables together with those for different definitions of smoking at ages

11, 13 and 15. In line with expectations, the experience of smoking increases markedly over this four year period.

Table 2 presents the first set of logistic regressions which model the effects of parental social class and personal income on smoking in three stages; model 1 showing univariate odds ratios for class; model 2, the same for income, and model 3 the independent effects of each. The analysis refers to ever smoking at age 11. Model 1 shows a highly significant inverse class gradient, the odds of smoking being over six times greater in class V than class I. Model 2 similarly shows a highly significant income gradient. Modelled together, each has a significant independent effect, that of income attenuating the social class effect to some degree. At this age, the higher income of lower class 11-year-olds is part (albeit small) of the explanation for their higher levels of smoking.

At age 13, two definitions of smoking are considered. Firstly, in respect of current smoking, model 1 shows that while the overall effect of social class is not significant, the odds of smoking in class V are significantly higher than class I. Model 2 shows a stronger effect of income. Considered together, the class effect is reduced. With respect to daily smoking, the pattern is rather different. In this case, the univariate relation with social class is significant, the effect of income is stronger, and though attenuated by income, a significant effect of class remains. Overall, the findings again show that while the personal income of 13-year-olds is directly related to smoking, increasing in magnitude with smoking level, this is only part of the explanation for class differences in smoking.

The age 15 findings for current and daily smoking are shown in table 4. In this case, there is least evidence of any attenuation of a social class effect by income. Thus, in respect of current smoking, although the overall class effect is not significant, adjusting for income results in virtually no change in the odds for each class. The corresponding odds for income are also unchanged. A rather similar pattern is observed for daily smoking though at this higher level of smoking there is some (slight) evidence of attenuation of the class effect. Overall, however, the pattern differs from those at younger ages and suggests the possibility of interaction effects between class, income and smoking.

Accordingly, we examined the evidence for interaction effects in all analyses, including those at earlier ages. These initially fitted all possible interaction terms, the only ones approaching significance being those between parental social class, personal income and smoking. When models containing only the interaction term (class*income*smoking) were run, with class and income entered as continuous variables, and sex and age adjusted for, the results revealed interaction terms for ever smoking at age 11 of $p=0.382$; for current smoking at 13, $p=0.416$, and for current smoking at 15, $p=0.044$. A further series of logistic regressions was therefore conducted to model the odds of smoking by income within social class, adjusting as before for sex and age. The results are shown in table 5.

Considered together, the pattern is remarkably similar at each age, personal income consistently having a significant effect on smoking in non-manual classes while having little or no effect in classes IV-V, III manual occupying a mid-position. At age 11, participants from non-manual classes in the highest income quartile were over four times more likely to have smoked than those in the lowest quartile, the corresponding differences in manual classes being progressively smaller. At 13, non-manual participants with the highest incomes were again more likely to be current smokers than those with lowest incomes, while in both manual classes the difference was much reduced and non-significant. With respect to daily smoking, the pattern is even more marked, the difference between income quartiles in non-manual classes being nearly eight times. At

Table 2 Age 11: ever smoking (odds) by parental social class and personal income (quartiles) (adjusted for sex and age (months)) (n=2370)

	Model 1	Model 2	Model 3
Social class	***		**
I	1.00		1.00
II	2.97*		2.74*
III _n	3.06*		2.62
III _m	4.50**		3.65**
IV	4.67**		3.73**
V	6.32***		5.21**
Income		***	***
Quartile 1		1.00	1.00
Quartile 2		1.69**	1.62*
Quartile 3		2.05**	1.86**
Quartile 4		3.32***	2.95***

* $p<0.05$ ** $p<0.01$ *** $p<0.001$.

Table 3 Age 13: current and daily smoking (odds) by parental social class and personal income (quartiles) (adjusted for sex and age (months)) (n = 2158)

	Current smoking			Daily smoking		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Social class				**		**
I	1.00		1.00	1.00		1.00
II	1.25		1.12	0.76		0.63
III _n	1.27		1.13	0.99		0.82
III _m	1.22		1.01	1.21		0.90
IV	1.09		0.89	1.27		0.92
V	2.17*		1.78	2.92*		2.15*
Income		***	***		***	***
Quartile 1		1.00	1.00		1.00	1.00
Quartile 2		1.21	1.23		1.14	1.13
Quartile 3		2.15***	2.18***		3.89***	3.81**
Quartile 4		2.56***	2.56***		5.03***	4.77***

*p<0.05 **p<0.01 ***p<0.001.

this higher level of smoking, there is also a significant income effect in class III manual. At 15, although the income effect is smaller than at 13, non-manual participants with the highest income were still nearly three times more likely to be current, and four times more likely to be daily smokers, than those with lowest incomes. In III manual, although the overall effect of income on both smoking measures is not significant, there is some indication of elevated odds in the higher income quartiles. By contrast, in classes IV-V there is no effect of income on either current or daily smoking. At higher levels of smoking (for example, 5+ cigarettes per day), the effect of income increases, and while this is again more marked in non-manual classes, there is some evidence (though not significant) of an effect even in IV-V (results not shown).

This pattern of results suggests that the cost of smoking differs between classes. Table 6, therefore, shows the class patterning of both our derived measure of expenditure (based on RRP) and the proportion of total weekly income this represents. This reveals, firstly, that the average amount spent on tobacco appears to be considerable, comprising about a third of total weekly income at 13 and over half at 15. However, reflecting the wide variation in number of cigarettes smoked per week (1–140 at age 15), the proportion of income spent ranges from almost nothing (<1%) up to and beyond 100% of total weekly income, some smokers (7% at 13, 17% at 15) apparently exceeding that amount. Secondly, despite a higher income, the proportion apparently spent on tobacco shows a small but significant increase with falling social class at both

ages. Standard deviations also increase between non-manual and manual classes, suggesting that on the basis of RRP the latter are more likely to spend beyond their means. This inverse association between tobacco expenditure and parental social class, therefore, is not consistent with the income/smoking associations shown in table 5, and suggests the assumption that young people from different class backgrounds access tobacco from similar sources, at the same price, is probably wrong.

DISCUSSION

The results from “11 to 16” confirm two of the most robust findings in the literature—namely, that smoking in youth is inversely related to socioeconomic background, and directly related to young people’s personal income, both most marked in early adolescence. However, they also show not only that the higher income of lower class youths is at best only a partial explanation of their higher smoking prevalence, but that the effect of income on smoking varies considerably according to a young person’s social background. For higher class youths, personal income is strongly linked to smoking at each age, encompassing all levels of smoking from experimentation at age 11 to daily smoking at 15. By contrast, for lower class youths, income levels are almost completely unrelated to smoking at any age, the possible exceptions being experimental smoking at age 11 and higher levels of smoking at 15. These analyses were repeated with different definitions of social class (using only fathers’/mothers’ occupations), including the “missing” category, and an alternative measure of SES,

Table 4 Age 15: Current and daily smoking (odds) by parental social class and personal income (quartiles) (adjusted for sex and age (months)) (n = 2012)

	Current smoking			Daily smoking		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Social class				***		**
I	1.00		1.00	1.00		1.00
II	1.20		1.16	1.71		1.65
III _n	1.33		1.29	2.28*		2.22*
III _m	1.56		1.49	3.07**		2.90**
IV	1.53		1.45	3.25**		3.09**
V	1.92*		1.86*	4.84***		4.67***
Income		**	**		**	**
Quartile 1		1.00	1.00		1.00	1.00
Quartile 2		1.57**	1.55**		1.96***	1.90**
Quartile 3		1.84***	1.82***		1.89**	1.85**
Quartile 4		1.79***	1.74**		2.06***	1.95**

*p<0.05 **p<0.01 ***p<0.001.

Table 5 Smoking (odds) by personal income (quartiles) within parental social class (three categories) at ages 11, 13 and 15, adjusted for sex and age (months)

Smoking	Non-man	III man	IV-V
Age 11 (ever)	***	*	
Quart 1	1.00	1.00	1.00
Quart 2	2.11*	1.48	1.16
Quart 3	2.21*	1.97†	1.34
Quart 4	4.43***	2.76**	1.99†
Age 13 (current)	***		
Quart 1	1.00	1.00	1.00
Quart 2	1.82	0.97	0.66
Quart 3	3.75***	1.62	1.02
Quart 4	3.88**	1.88	1.62
(daily)	**	*	
Quart 1	1.00	1.00	1.00
Quart 2	1.55	0.83	0.86
Quart 3	6.73**	3.28†	1.83
Quart 4	7.76**	3.86*	3.00†
Age 15 (current)	**	†	
Quart 1	1.00	1.00	1.00
Quart 2	2.26**	1.30	1.09
Quart 3	2.57***	2.04*	0.89
Quart 4	2.76***	1.54	1.00
(daily)	**		
Quart 1	1.00	1.00	1.00
Quart 2	3.48***	1.70	1.22
Quart 3	3.09**	2.16*	0.94
Quart 4	3.71***	1.75	1.17

†p<0.10 *p<0.05 **p<0.01 ***p<0.001.

residential deprivation.⁵³ In all essential respects, the findings were unaltered, indicating that the patterns found are general to SES rather than one particular measure.

The finding that personal income appears to matter for higher class youths, but much less for lower class youths, is perplexing and requires explanation. One likely explanation is that the cost of smoking varies between young people from different social backgrounds. While we cannot demonstrate this conclusively, it is strongly suggested in the discrepancy between the class findings on income and smoking and those on expenditure and proportion of income spent on tobacco. In respect of the latter, based on a standard econometric measure (the RRP of usual cigarettes/tobacco at the time of the surveys), our findings showed that the proportion of income spent on tobacco was inversely related to social class, not directly as would be predicted by the income/smoking findings. What this implies, as others¹⁹ have suggested, is unsurprising; retail and actual prices of tobacco are unlikely to be the same thing.

The significance of this has to be understood in the wider context of how young people access tobacco generally. There is now abundant evidence that young people get cigarettes from a wide range of sources including parents,² siblings⁵⁴ and

friends^{3 55} at little or no economic cost.^{3 25 31 32 56} Given the higher smoking prevalence among adults in lower social classes, it seems very likely that lower class youths have greater opportunity to access tobacco from family members and friends than their counterparts from higher social classes. Beyond informal sources of tobacco, it is also important to consider the broader context, particularly the role of the illicit market, which in Scotland appears to be much more marked in low SES areas.^{9 57} Here, the price of an illegal packet of cigarettes is about 40% cheaper than the recommended retail price.⁵⁸ and is easily available to young people. By contrast, youths in higher SES areas may have little choice but to obtain cigarettes through legal retail outlets at almost twice the price. It is also possible that informal markets of tobacco, wherein young people exchange cigarettes (often singly) for little or no money,^{55 59 60} are more characteristic of lower than higher SES areas. The cumulative evidence, therefore, all points to the fact that the gap between the retail and actual price of tobacco is greater for young people from lower than higher classes.

There are a number of limitations to this study. Most obviously, no data were collected on actual tobacco expenditure. Instead, we have had to rely on the same measure used in

Table 6 Derived expenditure on tobacco† and proportion of income spent on tobacco‡ by parental social class. Means (SD) among regular smokers (1+ cigarette per week) aged 13 and 15

	Non-man	III man	IV-V	Total
Age 13 (1996)				
Mean expenditure (£) (SD)	2.07 (2.85)	2.75 (3.05)	2.81 (2.64)	2.47 (2.86)
Proportion spent (SD)	0.24 (0.34)	0.32 (0.41)	0.41* (0.61)	0.30 (0.45)
Age 15 (1999)				
Mean expenditure (£) (SD)	5.54 (5.49)	6.44 (5.84)	6.98* (5.41)	6.29 (5.61)
Proportion spent (SD)	0.45 (0.49)	0.57 (0.69)	0.59* (0.53)	0.55 (0.58)

Test for linearity *p<0.05.

†Based on RRP of usual brand (during fieldwork).

‡Calculated as an individual's weekly tobacco expenditure/weekly income.

What is already known on this subject

- Young people's personal income and the socioeconomic status (SES) of their family are known predictors of smoking in youths, the prevalence being higher in those with more money and those from lower SES backgrounds.
- Based on econometric research, it is assumed (as with adults) that young people with less income are more price sensitive than their better-off peers, and that in consequence fiscal policies will reduce SES differentials in smoking.

What this study adds

- This study confirms the importance of both personal income and family SES (represented by parental social class) for smoking in youths.
- However, the interrelation of personal income, parental class and smoking is complex, not only because lower class youths have more money, but also because personal income is much more strongly related to smoking among young people from higher than lower class backgrounds.
- One likely explanation is that lower class youths have greater access to cheaper tobacco both from family and friends and from the illicit market. This complicates the relation between fiscal policies and smoking and might have the unintended consequence of increasing class differentials in youth smoking rather than the reverse.

the econometric literature, which is based on the standard retail price of tobacco. The absence of data on actual rather than assumed expenditure is a major weakness in all studies. A second limitation is the absence of data on sources of tobacco, which would have allowed some assessment of the role of family and friends as providers. A third limitation is that the study is located in an area of the United Kingdom that is known to have an established illegal market selling cheap cigarettes. The implication of this is that our findings, particularly those on different income/smoking associations within social class, might not generalise beyond this particular context.

With these caveats in mind, what are the implications of the findings for the potential effectiveness of fiscal policies in relation to youth smoking? By itself, the finding of a direct relation between young people's personal income and smoking is consistent with econometric research. It suggests that young smokers, particularly heavier smokers who spend a considerable proportion of their income on cigarettes, may respond to changes in the price of tobacco, legal or illegal, by quitting or reducing the amount they smoke. Whether this would impact on smoking initiation, experimental or occasional smoking is much less certain, as other investigators have indicated.¹⁵⁻¹⁷⁻

^{19 25 28 31 32} Even at standard retail prices, the cost of low levels of smoking is only a small fraction of young people's average total weekly income.

Our findings in relation to the effect of income on smoking for young people from different social backgrounds may also be consistent with econometric research which predicts that

changes in the price of cigarettes will impact most on lower income groups.¹¹⁻²⁹ In the case of young people, however, it is not lower SES youths who have least disposable income, but their peers from higher SES backgrounds. Furthermore, evidence that tobacco is cheaper in lower SES areas in the West of Scotland implies that young people from such areas are less likely to be price sensitive than higher SES youths who have less money to spend on more expensive cigarettes. Paradoxically, a rise in tax on tobacco may be more likely to increase rather than decrease SES differences in youth smoking.

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The Lighter Side



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